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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

BOYD, JENNIFER A

ART UNIT PAPER NUMBER

1771

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/051,881 | Applicant(s) JOHNSON ET AL. | |
| | Examiner Jennifer A. Boyd | Art Unit 1771 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 February 2005.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-13 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____.
 - 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

DETAILED ACTION

Response to Amendment

1. The Applicant's Amendments and Accompanying Remarks, filed February 28, 2005, have been entered and have been carefully considered. Claim 1 is amended and claims 1 – 13 are pending. In view of Applicant's amendment requiring that the adhesive layer bonds and *extends across* the entire surface area of the outer layer, the Examiner withdraws all previously set forth rejections as detailed in Office Action dated October 28, 2004. After another search was conducted, additional prior art has been found which renders in the invention as currently claimed unpatentable for reasons herein below.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 569955 A in view of Gatto (US 6,539,898). A full translation of EP 569955 A has been ordered and should be available in the next Office Action.

EP 569955 A is directed to a textile material for folding car covers (Title). The car covering comprises backing layer (A), waterproof layer (B) and insulating layer (C). The backing layer (A) comprises a woven material consisting of mainly polypropylene or copolyester. The waterproof layer (B) comprises a film or a foam consisting of mainly copolymers, elastomers, thermoplastic elastomers and/or thermoplastic polyolefins. The

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insulating layer (C) can comprise a nonwoven, open or closed pore foam, woven fabric, knitted fabric and/or nap sheeting, mainly based on polyester and/or polyolefin. The insulating layer acts as the inner decorative surface or can be covered by another decorative material. The layers of the cover are bonded together by laminating or other welding methods. The disclosure implies that the backing layer (A) can be treated with finishing chemicals such as chemicals which provide UV stability, anti-soiling properties and resistance to cleaning materials and contaminated rain (Abstract). The backing layer (A) is equated to Applicant's "outer woven fabric", the waterproof layer (B) is equated to Applicant's "adhesive waterproofing layer" and the insulating layer (C) is equated to Applicant's "inner fabric".

EP 569955 A teaches the claimed invention above but fails to specifically disclose that the backing layer (A), or "outer fabric layer", can comprise a woven material containing a core yarn covered by an extruded polymeric sheath as required by claim 2. EP 569955 A fails to teach that the coating is polyvinyl chloride and the core yarn is polyester as required by claims 3 – 4 and 6 - 7. EP 569955 A fails to teach that the core yarn has a denier between 70 – 1200 as required by claim 5 and the denier of the coated yarn ranges from 500 – 3500 as required by claim 8.

Gatto is directed to protective covers for animals such as blankets and turnout tugs for horses (column 1, lines 10 – 15). Gatto teaches a multilayered blanket (see Figure 2) comprising an *outer layer of mesh material* 48 (column 4, lines 60 – 68 and column 5, lines 1 – 15). Gatto teaches that the *mesh material*, equated to Applicant's "outer woven fabric layer", comprises a

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woven fabric manufactured with an *inner fiber* 70 coated with an *outer sheath* of polyvinyl chloride 72 (see Figure 4 and column 3, lines 55 – 61). Gatto notes that the fiber material is lightweight, high in strength and flexibility. The PVC coating provides temperature stability and resistance to color fade, abrasion, flame and mildew (Abstract). Gatto notes that these properties are very useful in material utilized as a protective layer for an animal cover or garment used outdoors (column 3, lines 1 – 3). In a preferred embodiment, the *inner fiber* is a high strength polyester fiber (column 4, lines 1 – 4). Gatto teaches that *outer layer of mesh material* has a yarn denier of 1000 to 2000 (column 4, lines 55 – 60). Therefore, the denier of the core component would be in the range of less than 1,000 to 2000 denier.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the polyester fibers which are extrusion-coated with a sheath of polyvinyl chloride as suggested by Gatto as the fibers in the backing layer (A) of EP 569955 A motivated by the desire to create a car cover having an outer material which is lightweight, high in strength, flexibility and heat stability and exhibits resistance to color fade, abrasion, flame and mildew.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use yarns having a core size between 70 – 1200 and the coated yarn size between 500 – 3500 as suggested by Gatto in the invention of EP 569955 A motivated by the desire to create a car cover which is high in strength and flexible.

4. Claims 9 – 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dellinger et al. (US 5,431,979) in view of Gatto (US 6,539,898) as applied above, further in view of Druckman et al. (US 4,996,100).

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Dellinger in view of Gatto teaches the claimed invention above but fails to disclose that the “outer woven layer”, can also include effect yarns selected from the group of acrylics, modacrylics, polypropylene, polyethylene and polyester as required by claim 9. Gatto fails to teach that the coated yarn content is at least 50% as required by claim 10. Gatto fails to teach that the coated yarn is introduced in both the warp and fill in a pattern alternating with effect yarns as required by claim 13.

Druckman is directed to improved fabrics suitable for use outside exposed to environmental elements (column 1, lines 1 – 8). Druckman teaches the alternating of vinyl and soft fabrics yarns in the warp direction and filling direction of a woven fabric (Abstract). Druckman notes that the resulting fabric has the durability characteristics of the vinyl while possessing soft characteristics provided by the soft fabric yarns (Abstract). Druckman teaches that suitable soft fibers may be modacrylics, acrylics, polypropylene, polyethylene and polyesters (column 2, lines 35 – 37). By examining Figure 2, it is shown that the majority of the yarns in the woven fabric are vinyl yarns rather than the soft yarns.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the effect yarns of Druckman in an alternating fashion as suggested by Druckman in the composite of Dellinger in view of Gatto motivated the desire to create a fabric with high durability provided by the vinyl yarns and soft characteristics provided by the effect yarns in addition to creating an aesthetically pleasing fabric.

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5. Claims 9 and 11 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dellinger et al. (US 5,431,979) in view of Gatto (US 6,539,898) as applied above, further in view of Swers et al. (US 6,557,590).

Dellinger in view of Gatto teaches the claimed invention above but fails to disclose that the “woven layer” can also include effect yarns selected from the group of acrylics, modacrylics, polypropylene, polyethylene and polyester as required by claims 9 and 11. Dellinger in view of Gatto fails to teach that the coated yarn is introduced in the fill alone as required by claim 12.

Swers directed to fabrics that are used for outdoor applications such as outdoor cushion upholstery, tents, awnings and marine applications (column 1, lines 24 – 33). Swers teaches that the fabric comprises a woven structure formed of warp effect yarns and self-coating yarns formed of high melt and low melt yarn constituents in at least part or all of the fill (column 1, lines 10 – 22). Therefore, in one embodiment, Swers teaches that the woven structure can comprise warp effect yarns in the warp direction and only self-coating yarns in the fill direction.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the effect yarns in the pattern as suggested by Swers in the mesh fabric of Dellinger in view of Gatto motivated the desire to create a fabric with abrasion resistance, load/elongation recovery, firm hand and weave stability while having an aesthetically pleasing looking.

As to claim 11, Dellinger in view of Gatto and Swers discloses the claimed invention except for that the coated yarn is introduced in the warp alone. It would have been obvious to one having ordinary skill in the art at the time the invention was made to create a fabric with

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coated yarn introduced in just the warp alone, since it has been held to be within the general skill of a worker in the art to select a pattern of yarns on the basis of its suitability for the intended use as a matter of design choice.

Response to Arguments

6. Applicant's arguments with respect to claims 1 – 13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Seber (US 4,933,231) is directed to an abrasion resistant, high strength composite padded fabric material comprising an outer woven fabric layer which can be coated with PTFE, a closed cell foam intermediate layer and an additional outer woven fabric layer. Seber fails to teach polyvinyl chloride yarn coating.

Haertel (US 1,928,356) is directed to rubberized material comprising textile sheets 1 and 3 united by a strongly adhering thin layer of rubber 5. The fibrous material can comprise silk, wool, cotton or mineral fibers. The composite is useful as a top for an automobile. Haertel fails to teach the polyvinyl chloride yarn coating and the use of synthetic core yarns.

EP 873896 B1 is directed to a cabriolet vehicle with a folding top comprising network structure layers 8 and 9 constituted by a polyester yarn provided with a PVC soft coating. EP 873896 B1 fails to teach that only *one* structure layer has a coated yarn.

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Sexton (US 2,857,654) is directed to an interwoven fabric for vehicle tops and the like (Title). The fabric comprises a bottom layer 1 of cross-woven fabric and an upper layer 2 of cross-woven fabric, and a plastic top layer 3 bonded to the layer 2 and extending into fabric. The plastic of layer 3 penetrates substantially through the layer 2 but does not impregnated layer 1. Sexton fails to teach extrusion coating the yarns of the outer fabric.

Fogt (US 4,526,828) is directed to a protective apparel material (Title). The material comprises a base layer 12, intermediate layer 14 and outer layer 15. See Figure 2. Fogt fails to teach extrusion coating of the yarns of the outer fabric.

Jarrard et al. (US 6,871,898) is directed to a soft cover for vehicles (Title). The cover comprises a water resistant fabric layer, a waterproof flexible foam layer and protective bottom layer. The protective bottom layer need not be as water resistant as top layer because the protective bottom layer is not exposed to the same degree of challenge from weather conditions during use. The effective date of Jarrard is March 27, 2003 so it cannot be used as prior art.

Baader et al. (US 5,733,620) is directed to a roof for vehicles, particularly convertibles (Title). The roof comprises an upper fabric layer 14 and a bottom fabric layer. A flexible rubberized layer is disposed between the upper and bottom fabric layer. Baader fails to teach the specific structure of the yarns of the outer (upper) fabric layer.

Lehnert et al. (US 5,851,934) is directed to a composite curtain comprising front and back coverings that are laminated together by a substantially impermeable and non-translucent center sheet. The front and back coverings may comprise a woven fabric. Lehnert fails to teach the yarns of one of the coverings comprises extrusion coated yarns.

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8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

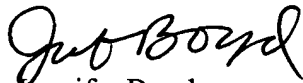
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jennifer Boyd
May 6, 2005



Ula C. Ruddock
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